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Rasmussen et al.

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(54) **DIGITAL MAPPING SYSTEM**

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(58) **Field of Classification Search** 701/200–213; 340/995.1–995.14
See application file for complete search history.

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(57) **ABSTRACT**

Various methods, systems, and apparatus for implementing aspects of a digital mapping system are disclosed. One such method includes sending a location request from a client-side computing device to a map tile server, receiving a set of map tiles in response to the location request, assembling said received map tiles into a tile grid, aligning the tile grid relative to a clipping shape, and displaying the result as a map image. One apparatus according to aspects of the present invention includes means for sending a location request from a client-side computing device to a map tile server, means for receiving a set of map tiles in response to the location request, means for assembling said received map tiles into a tile grid, means for aligning the tile grid relative to a clipping shape, and means for displaying the result as a map image. Such an apparatus may further include direction control or zoom control objects as interactive overlays on the displayed map image, and may also include route or location overlays on the map image.

10 Claims, 30 Drawing Sheets